CLAIMS

What I claim is:

1. A payload dispensing system particularly suited for being mounted on an unmanned aerial vehicle that communicates with a ground control station, said system comprising:

a) a receiver for receiving information from said ground control station and providing corresponding output signals;

b) a transmitter for transmitting information to said ground control station;

c) an autopilot responsive to the output signals of said receiver and providing corresponding output signals to said transmitter;

d) a payload dispenser comprising:

(i) a computer having at least one port for receiving output signals from said receiver and at least one output port;

(ii) a magazine holding said payload comprising a plurality of tubes each containing a capsule and each having a cartridge actuating device responsive to an electrical signal; and

(iii) a controller connected to said at least one output port so as to receive information from said computer and generating corresponding output signals therefrom, said controller having electrical means for being connected to each of said cartridge actuating devices, said controller in response to said information from said computer generating respective electrical signals to said cartridge actuating devices causing respective capsules to be ejected from said respective tube.

2. The system according to claim 1 further comprising a first video camera mounted on the front of said unmanned aerial vehicle and providing output signals that are routed to said autopilot.

3. The system according to claim 2 further comprising a second video camera mounted on said unmanned aerial vehicle so as to view downward and providing output signals that are routed to said autopilot.

4. The system according to claim 3 further a video switcher interposed between said first and second video cameras and said transmitter, said video switcher being

connected to receive and respond to said output signals of said receiver.

5. The system according to claim 1, wherein said unmanned aerial vehicle has a bomb bay with an opening and said magazine is mounted in said bomb bay with said tubes being exposed in said opening so that said capsules are ejected from said opening.

6. The system according to claim 1, wherein said electrical means for connecting said controller to each of said cartridge actuating devices comprises a breech plate having an appropriate wiring harness.

7. The system according to claim 1, wherein each of said tubes has opposite ends with said cartridge activating device at one end and a releasable cap at the other end.

8. The system according to claim 7, wherein said releasable cap is plastic.

9. The system according to claim 1, wherein said payload dispenser system further comprises a differential GPS

receiver providing output signals to an input port of said computer.

10. The system according to claim 1, wherein said payload dispenser system further comprises a first data link receiving atmospheric data and providing output signals to an input port of said computer.

11. The system according to claim 1, wherein said payload dispenser system further comprises a second data link interposed between said computer and said receiver and receiving output signals from said receiver representative of payload data link and providing output signals to an input port of said computer and receiving output signals from an output port of said computer.

12. A method of providing a payload dispensing system particularly suited for being mounted on an unmanned aerial vehicle that communicates with a ground control station, said method comprising the steps of:

a) providing a receiver for receiving information from said ground control station and providing corresponding output signals;

b) providing a transmitter for transmitting information to said ground control station;

c) providing an autopilot responsive to the output signals of said receiver and providing corresponding output signals to said transmitter;

d) providing a payload dispenser comprising:

(i) a computer having at least one input port for receiving output signals from said receiver and at least one output port;

(ii) providing a magazine holding said payload comprising a plurality of tubes each containing a capsule and each having a cartridge actuating device responsive to an electrical signal; and

(iii) providing a controller connected to said at least one output port so as to receive information from said computer and generating corresponding output signals therefrom, said provided controller having electrical means for being connected to each of said cartridge actuating devices, said controller in response to said information from said computer generating respective electrical signals to said cartridge actuating devices causing respective capsules to be ejected from said respective tube.

13. The method according to claim 12, further comprising providing a first video camera mounted on the front of said unmanned aerial vehicle and providing output signals that are routed to said autopilot.

14. The method according to claim 13, further comprising providing a second video camera mounted on said unmanned aerial vehicle so as to view downward and providing output signals that are routed to said autopilot.

15. The method according to claim 14, further comprising providing a video switcher interposed between said first and second video cameras and said transmitter, said video switcher being connected to receive and respond to said output signals of said receiver.

16. The method according to claim 12, wherein said unmanned aerial vehicle has a bomb bay with an opening and said magazine is mounted in said bomb bay with said tubes being arranged so as to be exposed in said opening so that said capsules are ejected from said opening.

17. The method according to claim 12, wherein said provided electrical means for connecting said controller to

each of said cartridge actuating devices comprises a breech plate having an appropriate wiring harness.

18. The method according to claim 12, wherein each of said provided tubes has opposite ends with said cartridge actuating device being placed at one end and a releasable cap being placed at the other end.

19. The method according to claim 18, wherein said releasable cap is plastic.

20. The method according to claim 12, wherein said payload dispenser system further comprises a differential GPS receiver providing output signals to an input port of said computer.

21. The method according to claim 12, wherein said payload dispenser system further comprises a first data link receiving atmospheric data and providing output signals to an input port of said computer.

22. The method according to claim 12, wherein said payload dispenser system further comprises a second data link interposed between said computer and said receiver and

receiving output signals from said receiver representative of payload data link and providing output signals to an input port of said computer and receiving output signals from an output port of said computer.

23. A payload dispenser particularly suited for being mounted on an unmanned aerial vehicle that communicates with a ground control station, said payload dispenser comprising:

a) a computer having at least one input port for receiving output signals from said receiver and at least one output port;

b) a magazine holding said payload comprising a plurality of tubes each containing a capsule and each having a cartridge actuating device responsive to an electrical signal; and

c) a controller connected to said at least one output port so as to receive information from said computer and generating corresponding output signals therefrom, said controller having electrical means for being connected to each of said cartridge actuating devices, said controller in response to said information from said computer generating respective electrical signals to said cartridge

actuating device causing respective capsules to be ejected from said respective tube.

24. The payload dispenser according to claim 23, wherein said unmanned aerial vehicle has a bomb bay with an opening and said magazine is mounted in said bomb bay with said tubes so as to be exposed in said opening so that said capsules are ejected from said opening.

25. The payload dispenser according to claim 23, wherein said electrical means for connecting said controller to each of said cartridge actuating devices comprises a breech plate having appropriate wiring harness.

26. The payload dispenser according to claim 23, wherein each of said tubes has opposite ends with said cartridge activating device at one end and a releasable cap at the other end.

27. The payload dispenser according to claim 26, wherein said releasable cap is plastic.

28. The payload dispenser according to claim 23, further comprises a differential GPS receiver providing output signals to an input port of said computer.

29. The payload dispenser according to claim 23, further comprises a first data link receiving atmospheric data and providing output signals to an input port of said computer.

30. The payload dispenser according to claim 23, further comprises a second data link interposed between said computer and said receiver and receiving output signals from said receiver representative of payload data link and providing output signals to an input port of said computer and receiving output signals from an output port of said computer.